



July 15, 2008

Via ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Ex Parte Presentation in: WT Docket No. 07-293, IB Docket No. 95-91, Gen. Docket 90-357, RM No. 8610, MB Docket No. 07-57

Dear Ms. Dortch:

This letter provides notice that on July 14, 2008, William Wallace, Chairman of DigitalBridge Communications Corp. ("DigitalBridge"), and its counsel, Jennifer Richter and Nick Allard of Patton Boggs, LLP, met with Commissioner Deborah Taylor Tate's Special Advisor for Wireless and International Issues, Wayne Leighton. Mr. Wallace also provided a copy of the attached materials. The substance of the conversation was to encourage the Commission to conclude the WCS/SDARS rulemaking.¹ As the Washington Post recently reported, DigitalBridge is having great success in rolling out advanced wireless broadband services in rural areas. The greatest impediment to providing these needed services, however, is the lack of available, affordable and suitable licensed spectrum. WCS spectrum could fill this void, but final technical rules allowing mobility must be adopted so that equipment can be manufactured, and rural wireless broadband services can be deployed.

Given that the WCS/SDARS rulemaking has been pending for over a decade, this is obviously not a matter that the Commission can leave to industry to resolve, nor is it a matter the Commission can place on the back-burner in favor of other higher-profile matters. DigitalBridge has no issue with the proposed XM-Sirius merger, but given the dire need for wireless broadband spectrum for rural services, DigitalBridge hopes the Commission will force the WCS/SDARS rulemaking to a conclusion at this time and complete the needed technical rules for the 2.3 GHz band.

¹ *Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band; Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, Notice of Proposed Rulemaking and Second Further Notice of Proposed Rulemaking, FCC 07-215 (rel. Dec. 18, 2007).



DigitalBridge has reviewed the WCS and SDARS rule proposals submitted by the WCS Coalition, which are attached to this letter. Based on this review, we believe that the WCS Coalition proposal strikes an appropriate balance, addressing the interference potential between SDARS terrestrial repeaters and WCS base station and user stations, while also enabling mobile broadband equipment to be developed for the WCS band to support the types of services and applications that DigitalBridge is seeking to offer.

For example, we note that the WCS Coalition's proposed rules for the WCS bands include transmit power limits for base stations that are significantly lower than those governing other mobile bands, one-quarter of the transmit power of the Commission's AWS-3 proposal, which will dramatically diminish the interference potential to SDARS and still enable two-way mobile broadband services. The WCS Coalition proposed a base station limit of 2 kW/5MHz average EIRP, which is the equivalent of 400 W/1 MHz average EIRP. By comparison, the base station transmit power level proposed by the Commission for the AWS-3 band for urban areas is 1640 W/1 MHz EIRP, which is the equivalent of 8.2 kW/5 MHz EIRP.

Similarly, the WCS Coalition's proposal includes a set of emission limits that are also significantly more stringent than those governing other mobile bands. The WCS Coalition has proposed a base station emission limit of $75+10\log(P)$ for the SDARS frequencies. This is 32 dB more stringent than the equivalent emission limit of $43+10\log(P)$ for base stations in other mobile bands, including the limit proposed for AWS-3.

For user stations, the WCS Coalition proposed the following set of emission limits as follows:

- $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz, and between 2341 and 2345 MHz;
- $61 + 10 \log (P)$ dB for frequencies between 2324 and 2328 MHz, and between 2337 and 2341 MHz;
- $67 + 10 \log (P)$ dB between 2328 and 2337 MHz.

This "stepped mask" is 12 dB more stringent than the typical mobile emission limit of $43+10\log(P)$. With the additional attenuation within the SDARS frequencies, such a stepped mask would offer more protection than an equivalent "flat" mask of $55+10\log(P)$. In the AWS-3 proceeding, the Commission has proposed a user station flat mask of $60+10\log(P)$, which is roughly equivalent to the WCS Coalition's stepped mask proposal. However, were the mask that applies to WCS user stations to be any more restrictive than a flat mask of $60+10\log(P)$, the development of handheld user stations would remain infeasible.



With regard to the WCS Coalition's proposed transmit power limits for user stations, it is worth noting that the Coalition's proposal does not distinguish between handheld user stations that will presumably be mobile in nature and user stations that are fixed. The WCS Coalition has proposed a single transmit power level of 20 W average EIRP for all user stations. This proposed power level is appreciably higher than is expected for handheld or portable devices, which will be designed to operate at much lower levels, namely in the range of 200-250 mW average EIRP, due to cost, battery-life and size considerations. Fixed user stations, on the other hand, could operate at power levels on par with the WCS Coalition proposal, but would be stationary and therefore less likely to be in close proximity to an SDARS receiver. Given these differences, it may be worthwhile to adopt two different transmit power limits for WCS user stations depending on whether they are mobile/portable or fixed.

DigitalBridge appreciates the opportunity to provide its perspectives on this important proceeding and urges the Commission to move quickly to bring resolution to this matter.

Respectfully submitted,

A handwritten signature in dark ink, reading "William F. Wallace".

William Wallace
Chairman, DigitalBridge Communications Corp.

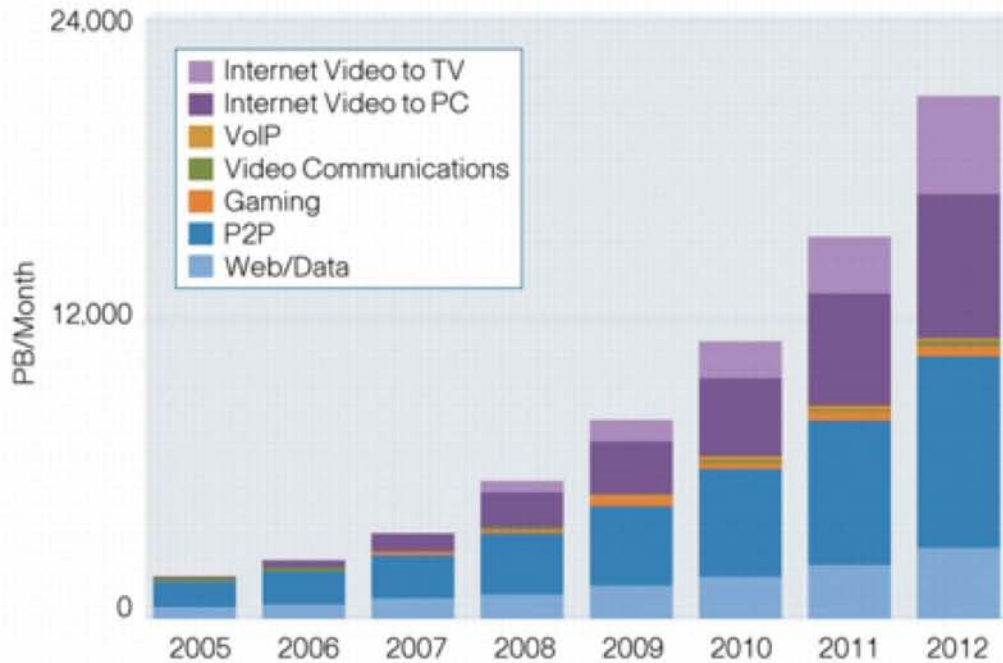


FCC Discussion

July 2008

Bandwidth demand is expected to double every two years

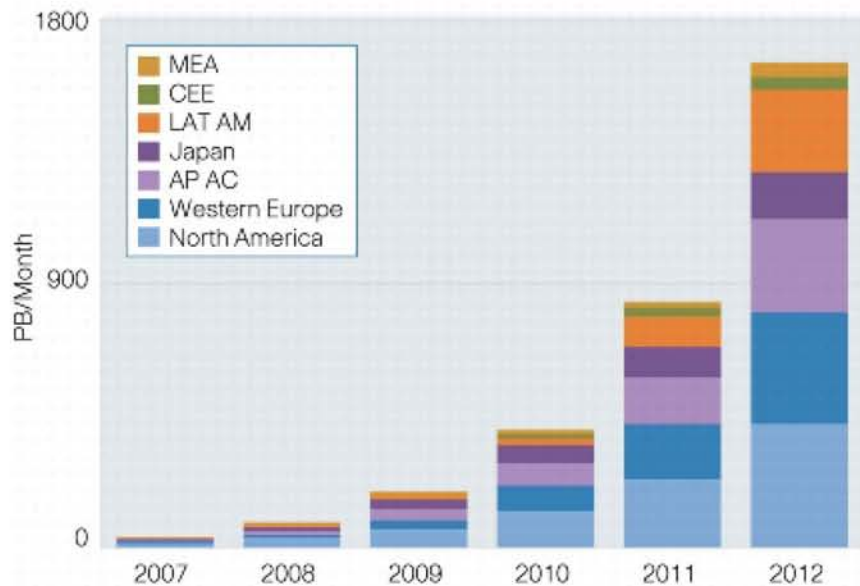
Cisco's Global Consumer Internet Traffic Forecast



Source: Cisco, 2008

Mobile data demand is expected to double every year

Cisco's Mobile Data Forecast



Source: Cisco, 2008

Mobile broadband demand will be fueled by new WiMAX-enabled devices

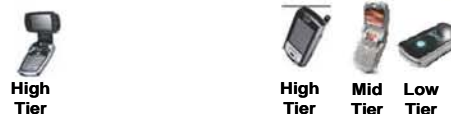
Consumer Electronics



Embedded Port. Devices



Handsets



Embedded PC Devices



Ext. Attached PC Cards



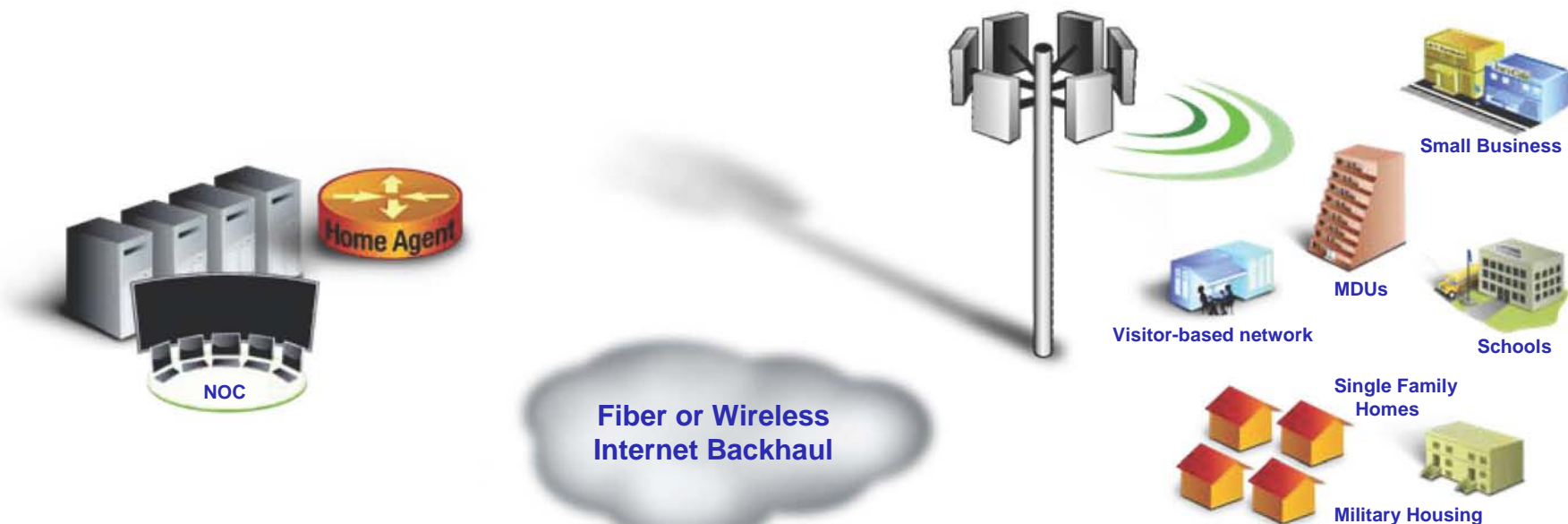
Modems



2008

2009-2011

DBC differentiates itself at three points in the broadband service delivery chain



First Mile

Flexible, low-cost back office

- Outsource/integrate:
 - Arise (customer care)
 - Aria (billing)
 - TNI (order mgmt)
- Outsource overhead
- Scalable – invest as you grow

Middle Mile

Low-cost, high-capacity backhaul

- Regional fiber capacity
- Municipally-supported transport networks
- Utility-owned fiber networks

Last Mile

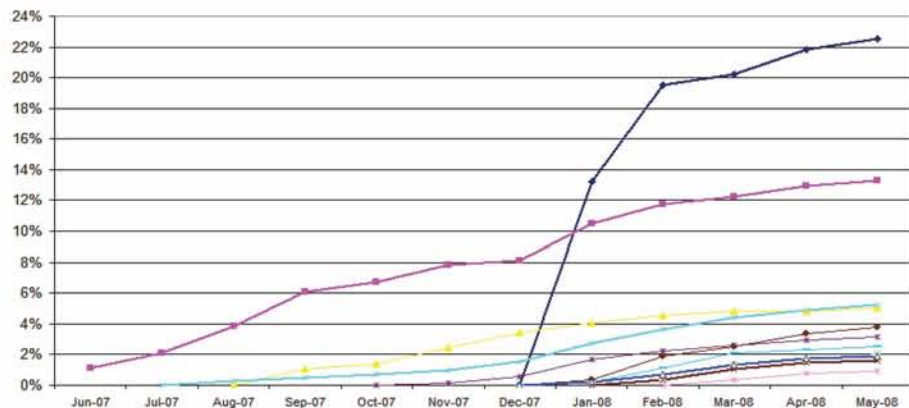
New WiMAX technology to reach end customer

- Underserved/exclusive markets
- Self-provisioned, fast install
- Portable → personal broadband
- No one between DBC and its customers



Launched markets are growing at or above planned rates

HH's Penetration



Town	As of 5/16	Monthly Ave Penetration Incr.
Town 1	22.5%	5.5%
Town 2	13.3%	1.2%
Town 3	5.2%	0.5%
Town 4	5.0%	0.6%
Town 5	3.8%	0.8%
Town 6	3.2%	0.5%
Town 7	2.5%	0.6%
Town 8	2.0%	0.5%
Town 9	1.9%	0.4%
Town 10	1.6%	0.5%
Town 11	0.9%	0.4%

Access to unencumbered WCS spectrum would enable DBC to serve large parts of rural Virginia



Surfing Roads Less Traveled

Ashburn Firm Makes WiMax a Reality in Small-Town America

By ZACHARY A. GOLDFARB
Washington Post Staff Writer

In Sprint's multibillion-dollar vision, Washingtonians will soon be able to sit in a moving car (passenger seat, please) and take part in a video chat while downloading a movie and writing e-mails.

That is courtesy of a fast, new wireless technology called WiMax. But while Sprint has faced delays making WiMax a reality, a little-known Ashburn firm has been connecting residents in such unlikely places as Jackson, Wyo.; Appomattox, Va.; and Idaho Falls, Idaho, to the Internet.

What DigitalBridge Communications has done offers a preview of what the technology might mean

for the rest of the country. DigitalBridge has brought broadband Web access to homes that had none, and now it's allowing people to access the Web on the road with their laptops at about the same speed they'd get at home or at work.

Mobile phone companies have unveiled all sorts of plans to allow people to browse the Web from laptops and smart phones, but none have offered the speeds rivaling what one gets at home. Sprint, in partnership with start-up Clearwire and giants Intel, Comcast and Time Warner, plans to roll out WiMax in Washington, Baltimore and Chicago this fall.

"It'll dramatically change the way they live and

See WIMAX, D6, Col. 1



BY KATHERINE FREY — THE WASHINGTON POST

DigitalBridge seeks to bring WiMax to cities with populations of up to 150,000. The company is led by, from left, Joe Kochan, P. Kelley Dunne, Scott Royster and William Wallace.

THE WASHBIZ BLOG

For a daily roundup of local business news, see our blog, which is updated throughout the day. Go to [u](#)

Ashburn Firms Brings WiMax to Small Towns

WIMAX, From D1

the way they enjoy the Internet. [Users] won't have to go back to their individual house or business or hotspot for broadband. They'll be able to do it wherever they want," DigitalBridge Chairman William Wallace said.

Joe Kochan, DigitalBridge vice president of operations, said about his own experience in Jackson in the passenger seat of a moving car: "We were going 40 miles per hour. I had a laptop. I was making a Skype call. I was watching a YouTube video and browsing a Web site at the same time."

Sprint, which has been trying to stem the exodus of customers from its mobile phone service, sees WiMax as a lifeline. Intel is looking for a second coming in the technology, putting WiMax chips in everything from laptops to smart phones, cameras and as-of-yet unimagined mobile devices. DigitalBridge is simply looking to build a profitable business — something it has yet to attain, though executives say their business model should make the company profitable within two years.

Formed by a trio of Verizon executives in 2005, DigitalBridge seeks to bring WiMax to cities with populations of up to 150,000. At first, the company focused on bringing broadband to where it wasn't. That included places like Appomattox, population 1,725, where cable and phone companies didn't want to invest in building expensive landlines to reach faraway customers.

When it selects a locality, DigitalBridge installs broadcast stations atop cellular towers and tall buildings, which are connected by fiber able to a regional Internet provider.



DigitalBridge allows people to access the Web on the road at about the same speed they'd get at home or at work.

The stations send a signal as far as three miles. Customers rent a device that looks like a modem and plug it into an electric outlet and into their computer.

DigitalBridge markets its service as BridgeMaxx, starting at \$25 per month. It first moved into Rexburg, Idaho, before spreading to other cities and states. DigitalBridge operates in 14 localities, marketing the product through newspapers, radio and sponsorships, including a rodeo in Twin Falls, Idaho. It has a network

of 20,000 customers that is growing by about 2,000 a month.

"You can aim the base station radio directly toward the pockets of underserved communities," Wallace said.

DigitalBridge sees its long-term success as dependent on the multitude of devices that will allow people to get broadband on the road — on a bus, in a park or by the lake.

DigitalBridge's WiMax has meant big things for some local customers. Bruce Herker runs a Rexburg busi-

ness called Eastern Idaho Sports Network, which broadcasts high school sports live online. In the beginning, he had to ensure he had access to a telephone line at a particular stadium to stream audio to people who couldn't make the game.

Now he plugs in a DigitalBridge modem, connects his video camera and streams live video to the Web.

In November, he broadcast a high school championship football game from the campus of Idaho State University in Pocatello. Later he learned

that one player's father serving in the military watched from Turkey, another player's brother watched from Iraq and the daughter of the head coach watched from China.

"As an audio station, you're just like radio," Herker said. "With video, that's completely different."

WiMax technology is not the only one trying to speed up connections. The big mobile companies routinely unveil networks that promise to give consumers faster links to the Web. AT&T, Verizon and others have placed their bets on a competing technology called Long Term Evolution.

There was a time when we viewed WiMax as the brave new world and the only player in the broadband mobile space," said Berge Ayvazian, an analyst at Yankee Group. As cellular companies such as Verizon unleash new technologies, he said, "there will be a full head-on competition between WiMax providers and cellular-based mobile operators."

DigitalBridge says it is unfazed. "We think that is going to be four years away," Wallace said.

DigitalBridge, with about \$10 million in annual sales, is one of the

largest recipients of venture in the region, having received more than \$30 million from Novak Venture partners, Paladin Group and the venture arm of Enterprises. It recently hired Royster, a top executive at L based Radio One, as chief financial officer.

One risk is that the installing WiMax base stations could run the same technical problem cellular towers did in the early days of mobile phones, such as frequent breakdowns. That's been a major concern among some carriers for Sprint, which with its part-

ment to building the service pervasive metropolitan areas.

Chief executive P. Kelley came up with the idea for DigitalBridge several years ago, standing atop the tallest building in Grundy, Va., population 1,102.

He realized that rather than installing the big financial commitment that a Sprint would in a big company could build a new by bit.

"We can build networks where there's existing demand."

the long run."



A little-known Ashburn firm, DigitalBridge offers a preview of what Wi technology might mean for the rest of the country.